

An
Inaugural Dissertation
On
Cataract
Submitted to the examination of
The
Rev. S. Andrews D.D. President
The
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For the
Degree
of
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To give a complete history of the subject under present consideration, from remote antiquity down to the present date, including the different erroneous opinions entertained by the ancients respecting the seat of this disorder, would be equally tedious as unimportant. I shall therefore proceed to treat of it agreeably to the received opinion which is now maintained of its existence.

By the term Cataract, then, we mean an opacity either of the crystalline lens or its capsule, whereby the transmission of light to the focus of vision is obstructed. The causes to which it has been ascribed are numerous, but obscure, as it sometimes occurs without any apparent cause, and is sometimes produced by external violence, irritations applied to the globe of the eye &c. It is said to occur most frequently

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in persons whose occupations necessarily expose
them to an intense degree of heat as blacksmiths
those engaged in glass manufactories &
those above the age of forty are more liable
to its attack though no age is exempt and it
is not infrequently congenial.

The symptoms which indicate its approach
are a dimness of vision exhibiting objects to
the patient similar to viewing them through
a mist, or to the appearance of gauze
between the object and eye rendering minute
objects confused, the appearance of moats
columns hairs threads &c are presented to
the eyes, a speck is frequently to be perceiv-
ed behind the pupil, which gradually
increases and progressively diminishes the
perfection of vision; during the progress
of these symptoms objects will be
perceived

perceived more distinctly in a moderate than a strong light owing to the dilatation of the pupil by the abstraction of this stimulus. The remedies which have been recommended for the removal of this distressing affection are numerous but regret to say they have all as yet proved ineffectual in the accomplishment of the purpose for which they were prescribed. The external remedies that have been employed are scarifications, cupping, leeches, caustics, issues, setons &c - the internal are Cathartics, Emetics, Elixirs, Hembane, Hemlock, and mercury the last of which has, after a long continued use succeeded in a few instances. Mr Ware recommends the application of one or two drops of Oil to the eye twice in 24 hours and rubbing the superior tarsus over the eye

eye with your finger previously immersed in
a mercurial or volatile liniment. To the
approbria of all these powerful medicines
however the opacity most frequently
increases under their administration, and
we are finally obliged to resort to a chi-
rurgical operation for the purpose of
removing the lens from the axis of vision.
There are two operations that have been
generally employed for its accomplish-
ment. The first and most ancient of
which is couching, and consists in depress-
ing the lens to the bottom of the eye by
means of a suitable needle for that
purpose. The second is the extraction
of the lens thro' a semisection of the
cornea effected by instruments hereafter
to be described. I might here enumerate
the

The former advantages must now be added to each of these operations by their respective advocates but as the time allotted for the completion of this paper is nearly all I have concluded to be a very succinct account of the different means of operating.

And first of couching to perform this operation it will be necessary to prepare a needle some eightths of an inch in length gradually tapering from the point to the handle, pointed flat upon opposite sides for the space of about one eighth of an inch from its point with a handle made of light wood of an octagonal form with an indelible piece upon opposite sides to designate its exact position behind the pupil a similar needle to this has been recommended by

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Mr Hay allows finger at a little curved at
its joint. It is recommended by some sur-
geons that the patient be seated upon
a chair with a high perpendicular
back, this however appears to be of im-
portance, even, suppose may be
better accomplished by an assistant
supporting the patients head upon his
breast. In some cases where the eye is
small and deeply seated in its orbit,
and ^{probably} ~~in~~ all cases the speculum oculi
will facilitate this operation. The patient
being seated upon a low chair opposite
a window in such a manner that the
light may fall laterally upon the eye
and the sound eye being covered which
is conveniently done by a band passing
round the head over the forehead hair
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two depending pieces attached to it opposite each eye. The surgeon is then to be seated upon a chair somewhat higher than the patient: and in order to give a greater degree of steadiness to his hand, is advised to place it upon some elevated body, & by something placed under his foot. Before introducing the needle the patient is directed to turn the eye to the internal canthus. The instrument is then to be inserted into the sclerotic coat one sixth of an inch from the cornea, about one line above the transverse commissure of the eye, and carried between the red and white, the eye being so handled and supported that the point of the needle downwards and backwards to carry the white to the bottom of the

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the window human.

Secondly in opening
the operation of extraction it will be necessary
to be provided with the following
instruments. First a Cornea force more
after the direction of Brown design
its shape is similar to a common lancet
cut increasing gradually in breadth from
the point to the handle where it
should be something wider than the
transdiameter of the cornea next
a needle a little curved at its point
with which the capsule of the crystalline
lens may be torn Third a little
scoop of gold or silver for the purpose
of removing small fragments. Fourth
a small hook to be passed through
the pupil and fixed in the body
of the

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of the lens for the purpose of extracting it.
Fifth - small forceps.

The patient and the
surgeon being seated as in the operation
for cataract the assistant who supports
the patients head is to raise the upper
eyelid and to fold the skin upon the
superior edge the tars is stretched in pro-
sion firmly against the frontal margin of
the orbit, the surgeon passes down the
lower eyelid and waits until the eye
is steady. he then applies the point of
the knife to the cornea one eighth
of an inch from the sclerotic, and
when the eye becomes steady the
puncture is to be made, the knife
is then to be raised across the eye
and brought out at the opposite

side.

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54 by the escape of the aqueous humor
or any other cause, the iris should come
forward so as to endanger its being
cut, it may be made to recede by
gently rubbing the cornea with the point
of the finger. Having divided the
cornea, the pupils should be dilated
and the patient suffered to remain
quiet for a short time. In proceeding
with the operation, the eye should be
gently raised, and the needle introduced
into the eye for the purpose of
lacerating the capsule. The needle
being again introduced the eye is
to remain quiet for a few min-
utes, that the pupil may di-
late.

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after resting for a short time the eye
 is opened by the surgeon and pressure
 made, at the same time the
 eyelids, portion of the corner is raised
 with the scapel; if the iris does not
 come away then it is to be taken
 up with the hook after the way
 is cut the iris should be immedi-
 ately closed, and after a few min-
 utes opened by the surgeon to exam-
 ine the state of the pupil; if the
 exposure is not sufficient the patient
 will see; if otherwise the operation
 will still be performed in the pupil.
 The surgeon should then proceed to ex-
 tract the fragments with the scapel;
 those that are concealed may be
 brought into view by rubbing the
 finger

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finger over the eye. Sometimes the lens cannot be extracted either by pressure or the hook, owing to adhesion existing between the capsule of the lens and the iris; these adhesions may be destroyed by the needle which is an extremely nice operation. The object is inserted to the patient after the operation for the purpose of ascertaining whether sight is restored should not be so brilliant or imminent, nor should the eye remain open long.

After the operation is completed a soft dry rag is to be applied to the eye, the depending piece of the circular bandage is to be let down over the eye, and on this a bandage should be carried round the

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the head. The patient is then to be put to bed and lie on his back, all light should be excluded the apartment; he should live upon a vegetable diet, and may drink out of a teapot thereby obviating the necessity of raising his head; his hands should be secured in such a manner as to prevent his rubbing the eye while asleep. The dressings should be renewed every day in order to obviate the irritation that might arise from the exudation absorbed by the dressings becoming dry. In changing the dressings we should be careful that nothing prevent the divided edges of the cornea from coming in contact. The under eyelid should always be pulled down, as this sometimes gets
into

into the wound and thereby retards the
cure. In a fortnight or three weeks, the
dressings may be omitted. —

The name of the ship is the
in a letter to the
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